## Solar Bulletin

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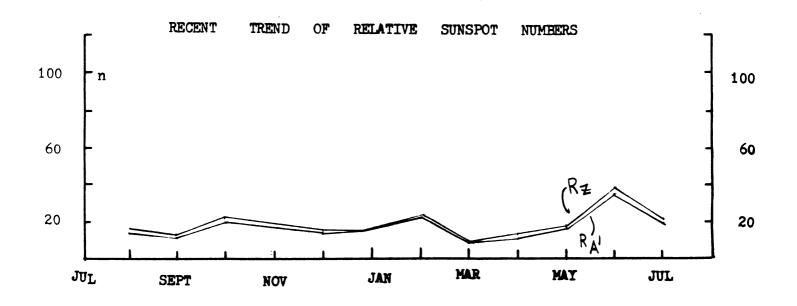
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JULY 1977

## SUNSPOT ACTIVITY FOR JULY

Sunspot activity decreased considerably from the level of July. The mean of the American sunspot numbers was 18.3 compared to 34.4 last month. There were four spotless days compared to none last month. No ionospheric disturbances were recorded during July.

The Solar Division wishes to congratulate RALPH BUCKSTAFF on the occassion of his 90th birthday which will occur on the twenty-eighth of August. Ralph has been a sunspot observer continuously since 1945 and until recently observed Sudden Ionospheric Disturbances as A.A.V.S.O. observer A-6.



AMERICAN ( $R_{\underline{A}}$ ) AND ZURICH ( $R_{\underline{Z}}$ ) RELATIVE SUNSPOT NUMBERS FOR JULY 1977

DAY	R <sub>A</sub> ,	R <sub>Z</sub> 42 45		DAY		R <sub>A</sub> *	$R_{Z}$
1 2 3 4 5					16 17	0	0
3	41	42	MONTHL	y means	18	Ö	Ö
4	41	39 40			19	1	7
	43	40	R <sub>A</sub> ,	18.3	20	3	8
6	35	40			21	9	8
<b>7</b> 8	26	25	$^{\mathbf{R}}\mathbf{z}$	21.2	22	18	23
8	23	20			23 24	26	30
9	17	17			24	27	45
10	13	23			25	32	45 38
11	10	9 8			26	32 26	41
12	10				27		34 26
13	14	10			28	19	26
14	2	?			29	17	16
15	0	0			30	7	8
					31	2	7

## SUDDEN IONOSPHERIC DISTURBANCES RECORDED DURING JULY 1977

None were detected by AAVSO Observers

Charts from the following observers were received and analyzed

A-1 4 26 30 30 31 34 36 37 40 43